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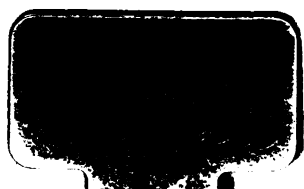
HOMELY HINTS ON HEALTH



by

Mrs. W. T. GREENUP

Examiner to the
South Kensington School of Cookery







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EXAMINER TO THE SOUTH KENSINGTON SCHOOL OF COOKERY



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Dedicated

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TO

THE HON. E. F. LEVESON-GOWER, M.P.,

CHAIRMAN

OF

THE EXECUTIVE COMMITTEE

OF THE

SOUTH KENSINGTON SCHOOL OF COOKERY.

P R E F A C E .

THE subject of National Health is one of increasing interest and importance. "How to secure it," is a question which has occupied the attention of many great minds during the last few years.

There is no doubt that the diffusion of the knowledge of the Laws of Health must play a great part in solving this grave question, by bringing it *home* to the people. They cannot practise what they do not know ; nor can we have a healthy nation unless we first have healthy homes. If we would secure National Health, we must *convince the people* of their individual responsibility in the matter. We must also *train the children* to know and to practise the Laws of Health. It is generally easier to instil principles into young minds than to change them in more mature ones.

This little book is sent forth in the hope that it may serve both to *convince* and to *instruct*.

ORMONDE HOUSE, RYDE, I.W.,
May 1st, 1884.



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HOMELY HINTS ON HEALTH.

1.—WHAT IS HEALTH?

HEALTH may, perhaps, be most aptly defined as “A Sound Mind in a Sound Body.” This implies that all the various functions of the body move on in uninterrupted action, and in perfect harmony. When such is the case, we find pleasure in the employment of all our faculties, whether in labour or recreation; and have the power to enjoy life, as well as to make it happy and useful.

Health is a priceless blessing which wealth cannot buy, but which common sense may, to a very great extent, preserve. It is very certain that much of the pain and misery which exist in the world are self-inflicted. Carelessness, Indolence, Intemperance, and Ignorance are the combined and mighty forces which have hitherto battled against Health. Alas! that Wealth should so often have allied itself with these foes in squandering health and fortune together!

Science, legislation, and philanthropy have achieved great conquests over ignorance and intemperance during the last few years. Science has sought out the origin of various diseases, and prescribed means for their prevention; laws have been made with a view to enforcing the means recommended by science; whilst philanthropy has done much to spread the knowledge of the laws of health by means of various Health and Sanitary Societies. The result is that we have improved National Health. Several of the fearful epidemics, which were formerly the dread and scourge of our nation, have been almost stamped out, and we no longer stand in such fear of cholera or small-pox as we were wont to do less than twenty years ago.

But much remains to be done ere the great masses of the people can be made so fully alive to their own interests as to second the efforts of the few. The great problem is, *how to convince them that every home is responsible for the health of the nation*. Many are apt to overlook the fact that National Health is a very *homely* as well as a very scientific question. Happily the Laws of Health are so simple, that they may be practised in every home, and made plain to every individual.

To show how simple and practicable they are is the aim of this little book. It is intended to explain, in homely rather than scientific language, how every individual may do his or her best to possess and preserve the perfect health which makes labour pleasurable, rest sweet, and life happy and useful.

2.—TAKING CARE OF HEALTH.

Most people are fond of hoarding treasures. Some are stored as relics of childhood or of long-lost friends, some as mementoes of pleasing or sad events, and others because they have "cost so much."

Strange to say, the most precious treasure we have—that of Health—is often left to take care of itself, and is seldom guarded until in danger of being lost. "*If I had only taken care,*" is an expression we often hear from an invalid.

How to preserve health is a question which should engage the attention of every individual. When we come to consider the structure of the human body, with its framework of more than two hundred bones; its numerous muscular fibres; its miles of tender thread-like nerves; its organs of circulation, respiration, and digestion; it seems a somewhat complicated machinery to keep in order. But, like all beautifully constructed and well-adjusted machines, it is not so difficult to keep in perfect working order as at first sight appears.

Now (to use a homely illustration), if we have a new sewing-machine sent home, our first thought is, "Where shall we keep it?" Damp will rust it, and dust will clog up the machine and impede its action. Then comes the question, "How shall we use it so as not to put it out of order?" If we attempt to make it do more than it is capable of doing, we shall put too great a strain upon it, and probably render it useless. If we do not use it frequently, its smooth-

ness will wear off, and it will not work well. Just so it is with regard to the intricate machinery of our bodies. If we would preserve our bodies in perfect working order, or, in other words, in perfect health, we must be careful where we keep them, and how we use them—more definitely speaking, we must mind *where we live*, and *how we live*.

We cannot all live exactly where we like. The circumstances of *occupation* and *means* must generally determine the locality for us. But *common sense* must guide us in the selection of our homes. If we would preserve health, we must live in light, dry, airy, and cleanly homes.

How we live is a matter which is mostly under our own control. "Temperance in all things" should be our motto. We must not put too great a strain upon the body by overwork or excessive exercise; nor must we clog up the organs of digestion by immoderate eating and drinking, or they will cease to do their work, and the whole machinery will break down. There is no doubt that more than half the ills of life are due to over-indulgence in eating and drinking. When the nation becomes temperate in these respects, our medical men may hope for more rest than most of them are at present able to obtain.

On the other hand, it is just as essential to health that the body be kept in constant use. Indolence will soon clog up the wheels of action, make the mind grow dull, the body useless, and life a burden.

A proper supply of Food and Clothing plays such

an important part in the preservation of health, that we must treat these subjects more fully later on.

It is not given to everyone to possess perfect health. Some are *naturally* delicate, or of weakly constitution. Let them bear in mind that, while a strong constitution may be preserved, a poor one may generally be improved by a strict observance of the laws of health.

3.—CHOOSING A HOUSE.

This chapter is intended especially for young people about to set up housekeeping. We fear they are often tempted to "take a house" on the sole recommendation of its pretty appearance. They are charmed with its nicely-shaped rooms, with their dainty little bay or French windows; delighted with the little piece of garden which surrounds it; and think it altogether exceedingly nice *for the price*. *But no house is cheap if it is unhealthy.* Some more experienced friend will ask them, "Is the house dry?" "Is it well drained?" "Is there a good supply of pure water?" And the young people are obliged to confess that these questions never crossed their minds—they took the house because it "looked so nice," and they *supposed* it must be all right. Alas! how many pretty-looking houses are most unhealthy! And how many people run headlong into ill-health for want of care in choosing a home! How often have we known families to be constantly suffering from ill-health, and paying many pounds

a-year in doctors' bills ! At last it has been suggested to them that the house is not healthy—the defects are traced, their constant ill-health accounted for, and they at once remove to a better-constructed dwelling. Health gradually improves, and by the end of a year the increased rent, which was rather an anxiety at first, is more than met by the decrease in the doctor's bill. It is poor economy to pinch the rent to pay the doctor.

In choosing a house, the chief points to be considered are :—

1. Is it dry ?
2. Is it well drained ?
3. Is it light ?
4. Is it well supplied with good water ?
5. Are its surroundings such that a constant supply of pure fresh air can always be admitted ?

A *damp* house will produce colds and rheumatism. An *ill-drained* house is a hotbed of fever. A *dark* house is cold and cheerless, and causes those who live in it to become subjects of depression of mind and nerve. "Where the sun never comes, the doctor does." *Impure water* is productive of many diseases—amongst them being typhoid fever and diarrhoea. Breathing *foul air* poisons the blood, and causes no end of distressing ailments—fever being the most common amongst them.

In the overcrowded districts inhabited by the poor in our large towns, it would seem that all these important conditions of health had been utterly disregarded in the building of dwellings in former

years. And what has been the result? Fevers, small-pox, and cholera have always been most prevalent and fatal in such neighbourhoods, simply because the condition of the houses and people was so well calculated to foster such diseases. How to rid our towns, and especially our metropolis, of these fearful dens of disease, and to bring some of their most wretched inhabitants into a state of health and morality, is a mighty problem. But it does not seem quite impossible to solve it. Philanthropy and Benevolence will be most likely to succeed in arousing the poor to their own interests, and in teaching the Laws of Health, which Legislation must enforce.

It is impossible to have a healthy nation whilst so many unhealthy homes are allowed to exist. The poor *must* live somewhere, and at present it is their unhappy lot to live where they *can*. They must have shelter; and poverty drives them to take *what* they can get, and *where*. The conditions of a healthy home are things most of them have never heard of. They cannot help themselves out of their wretchedness—their poverty will not allow them. Surely, it behoves all who can to help those who cannot help themselves. Let us hope the day is not far distant when the poor shall dwell in *homes* instead of shelters. We may then hope for an improved National Morality as well as National Health.

4.—DAMP HOUSES.

A damp house cannot be healthy. It is sure to be cold; and when cold and damp unite their depressing influences on a human body, colds of every kind, inflammation, rheumatism, consumption, neuralgia, will sooner or later result.

Very many young people like to begin house-keeping in a *new house*. The question of how long it has been built and plastered never occurs to them, and they will perhaps be in readiness to live in it as soon as the workmen are out of it. In the present day, houses are built up so quickly, that they are plastered inside long before the outer walls are dry, and the consequence is, that a great deal of moisture is built up with them. They probably *look* dry in the course of a week or two if the weather be fine. But when fires are lighted, what do we see in the course of a few hours? Moisture streaming down the walls and steaming over the windows; for the heat has brought out the damp. Doors and windows are closed for the night—the bedrooms become filled with damp air—and the occupants wake up in the morning with a bad cold, sore throat, or a twinge of rheumatism. It is *most indiscreet* to live in a very new house. Not only our bodies, but clothing and furniture suffer seriously from the effects of a very new house.

But it is not merely new houses that are damp, for dampness arises from many other causes than newness.

A house built in a valley is not as dry as one built on a hill. The air surrounding it is more

damp; unless the valley be well drained by surface drains, in the form of streams or gutters, the rain often lies for days together, thus making the air moist and the ground damp.

Dampness may depend upon the character of the soil upon which a house is built. A very sandy soil will absorb a quantity of water, and, whilst it appears dry on the surface, will throw out much moisture. A gravel soil is certainly the most healthy, as not retaining moisture to such a degree. A clay soil is least desirable for building upon. It is cold, and naturally retains moisture. In districts where the soil is generally of a clayey formation, great attention should be given to the drainage of it. There should be plenty of surface drains to carry off rain, and these should lead to underground drains, so that the water may be carried away from the houses entirely.

A defective roof is a frequent source of damp, as are also ill-fitting window frames. The rain will find its way through the roof and windows, and saturate the walls and floors of bedrooms, often coursing its way through the walls of the rooms underneath.

Sometimes dampness is attributable to the very porous character of the bricks or stone with which cheap houses are built. The only remedy for this is to cover the walls outside with a cement, over which a coating or two of paint should be placed.

Another very fruitful source of damp, especially in country houses, is the over-abundance of trees round them. These prevent the sun's rays from reaching the house, and also from drying up the moisture

around it. Trees are a great protection to a house when cold winds blow; but they should be placed at a proper distance from the house, so that they may not shut out the sunshine.

But the most common cause of damp is insufficient or inefficient drainage, and it is often the most difficult one to discover or to rectify.

Whoever finds their house damp, should *at once* endeavour to search out the cause, and have it remedied. If this is impossible, leave the house; it will prove itself dear at any price.

5.—THE DRAINAGE OF A HOUSE.

The drainage of a house is the means employed to carry off superfluous water from the surface, and all slops from the interior.

Drainage is one of the most important points in connection with the preservation of health, yet often one of the most neglected ones.

It is often very difficult to tell whether a house is well drained or not, unless we have actually watched its building. But if any unpleasant smells rise from the water-closets, sinks, or any other drains in sight, we may be quite sure something is wrong, and the sooner it is put right the better. *Most invasions of fever are traceable to defective drainage.*

In old houses it is often very difficult to trace the drains, for they are sometimes built up between walls, and those that are underground are hidden

away, without any mark to indicate where they are. A better knowledge of the laws of health has taught men better than to drain houses after this fashion, though some of our modern houses are far from being efficiently drained.

Like all other things, drain-pipes will wear out. They crack, or become loose at the joints, and then leakage takes place. What must be the consequence if the pipes are between the walls in a house? The walls will become saturated, and the house will always have a disagreeable smell, which will render the air impure, and quite ready for fostering a fever. Here is an instance of a leaking drain-pipe which came under the writer's notice some time ago when house-hunting. On the bedroom landing was a housemaid's sink, *apparently* in good condition—the outlet pipe being carried right outside the house. But, on opening the door of a china-closet in the lower hall, a most disagreeable smell emanated from it. Nothing wrong could be discovered, until a light was procured, and the ceiling of the closet examined. Then the secret was revealed. The housemaid's sink was *over* the china-closet, and *the drain-pipe had a leakage in it*. The ceiling had thus become saturated with dirty water, and the tenants had been so blind to their own interests as to leave the matter unnoticed. A fungus was actually growing on the ceiling of the china-closet! The outlet-pipe of a lavatory basin in the same house communicated with the main sewer, and evidently kept the house well supplied with deadly sewer gas. And for this probability of having

fever or diphtheria, some one, either very ignorant or very careless, had been paying one hundred and twenty pounds a-year !

The outlet-pipes of all sinks and basins should be carried *outside* the house, and the water from them allowed to run into the *drains* which communicate with the main sewers. If they are in *direct* communication with the sewers, the house will be rendered unhealthy by the sewer gas which will escape from them. All water-closets and sinks should be properly trapped, so as to shut off the escape of sewer gas. So also should all the outside drains which surround a house. All these matters should be looked into most minutely before taking a house.

Any stoppage in a drain, whether inside or out, should receive immediate attention. Water-closets have sometimes such a poor flush of water that it is powerless to carry off foul matter thoroughly. To remedy this, it is a good plan to fill the pans several times a week with fresh water, in which a little chloride of lime, or other disinfectant, has been dissolved, then lift the trap and allow the water to escape full force into the outlet-pipe. This clears the drains and keeps them disinfected, while the cost and trouble are very trifling.

A well-drained town may be unhealthy if the houses in it are not well-drained too ; and, *vice versa*, well-drained houses may be made unhealthy through a lack of efficient town-sewerage to carry off all refuse.

Systems of house-drainage and town-sewerage

which were thought very good twenty years ago are scarcely tolerated in the present day. Many towns have had their whole sewerage re-constructed, and certain restrictions are put upon the construction of new dwelling-houses, as well as a stricter supervision made of all property.

6.—WATER-SUPPLY.

Pure water, and plenty of it, is essential to the health of every household. Drinking foul water will produce fever and other diseases; and a lack of plenty of water for personal and home cleanliness will have the same effect.

In our well-watered country we have many and constant sources of water-supply. Wells, springs, rivers, and brooks are the sources to which the inhabitants of country districts look for their water-supply, apart from that which they collect from rainfall. In towns, water-works companies enclose reservoirs, and supply town houses with water, which they convey by means of underground pipes, and, in most instances, make us pay very dearly for, too. But they are responsible for its purity, which is frequently tested, and this is the great advantage gained by householders.

Water should be perfectly clear and bright, and free from any taste or smell. Sometimes a water will look clear and bright, and yet be impure. This is often the case with water drawn from wells too near the surface, especially if they are in the neigh-

bourhood of drains or cesspools. The foul water from the latter oozes through the soil and mixes with that of the well, causing what is termed organic impurity. It is this organic impurity of water which gives rise to disease, very especially to typhoid. Typhoid fever is often carried to a district by a milkman, simply because the milk has been contaminated by cows drinking water into which farm refuse has oozed. In this case the milkman sins innocently. But when milk is deliberately mixed with water which *may* be, and often is, impure, who is to blame if an outbreak of typhoid follows the consumption of this so-called "pure milk"?

If *well-water* be used for drinking, it should be from a very deep well, far removed from any drains or cesspools. If *brook-water*, it should be from a swiftly-running brook. Standing or *stagnant water* should never be used for drinking purposes, whether from pools, ponds, tanks, or any vessels, especially wooden ones.

The presence of organic impurity in water may be tested in a very simple manner. Take a cup of the water and mix with it a few drops of weak sulphuric acid. Then stir into it as much permanganate of potash as will make it a bright purple colour; cover the cup with a piece of glass, and let it stand for a time. If there be any organic impurity, the beautiful purple colour will soon fade away, leaving the water almost as colourless as when freshly drawn. This is a *very* cheap and simple test.

Very hard waters contain a great deal of lime—

some also magnesia and iron. These are not, as a rule, objectionable impurities, though an over-abundance of them favours diseases of the kidneys.

All water should be filtered before drinking. Where the cost of a filter is a consideration, a very good one may be made at home in the following manner:—Get a large common flower-pot, cover the hole with a piece of clean flannel or perforated zinc, then fill up the pot two or three inches with small clean gravel; on the top of this place a layer, about three inches thick, of well-washed white sand, and cover this further with a layer of about two pounds of animal charcoal, which must be first washed in several hot waters. Pour the water on the top, and let it filter through into a water-bottle or jug, and it will then be fit for drinking. The charcoal will require to be taken off, washed, dried, and replaced occasionally, and after some time entirely renewed.

In lieu of filtering, water may be boiled, and then allowed to cool in stone vessels. But this robs it of its freshness, and it is therefore not so enjoyable as a draught of freshly-drawn water passed through a filter.

Parents cannot too early impress upon children the necessity of being careful where they take a drink of water from when thirsty. A thirsty child will generally take a drink from any water that looks comparatively clean, and may thus expose itself to danger.

7.—FRESH AIR—ITS IMPORTANCE TO HEALTH.

How to secure a constant supply of fresh air in our houses is a question which demands most serious consideration. It is appalling to think how many lives are sacrificed every year, especially in our large towns, for want of fresh air. Happily, the importance to health of a proper supply of pure air is becoming better understood. Yet we still meet with numbers of people who seem to regard fresh air as a luxury to be enjoyed only out of doors, and rigidly excluded from their homes.

Fresh Air is one of the best friends we can possibly have in our homes. Let us explain why.

As we breathe, we are constantly drawing air into the lungs, and giving it out again. The air we take in, *if it be pure*, makes our blood a bright-red colour, as all healthy blood should be. But, in passing through the lungs, the pure air becomes greatly changed. The *oxygen*, which is the life-giving element in the air, not only purifies the blood, but joins with the *carbon* in our bodies. The two together make a great deal of heat, and form *carbonic acid gas*, which is given out through the lungs in exchange for the air which was taken in. But this carbonic acid gas is a deadly poison. If we place a small animal in a bottle filled with it, life will at once become extinct through suffocation. This noxious gas has exactly the same effect on human beings. What then must be the consequence to us

if we sit for any length of time closed up in a room into which the fresh air from without cannot come? We keep breathing the same air over and over again, until it has become thoroughly charged with this deadly poison! We become drowsy, have a headache, or, unless we rouse ourselves, fall asleep. If we continue to sleep on, and breathe this same air, our blood will be poisoned, heart and lungs will cease to work, and life will end in suffocation. Alas! how many have thus ended life in a small closed-up bedroom, poisoned by the air they have themselves breathed out! It is of the utmost importance that we have pure fresh air in all our rooms, but especially in our bedrooms. We spend on an average about one-third of our lives in them; and, as we spend the time in sleep, and are not constantly going in and out, as we are in our sitting-rooms, the air in them has not the same chance of getting changed by the doors being frequently opened.

We must take care, then, that our bedrooms are well *ventilated*—that is, that they are by some means kept supplied with a constant current of fresh air. The impure air is lighter than the fresh, and as fresh air is admitted into a room, the impure rises to the top. But if it cannot find a way out, it contaminates the whole air. The question is, then, how to supply a room with fresh air, and at the same time to provide for the escape of foul air.

Hundreds of years ago, houses were unintentionally ventilated by the careless manner in which they were

built—badly-fitting doors and windows allowing a free entrance of air from without. Then, again, the very wide open fireplaces and chimneys gave ample scope for the escape of foul air. But with our modern building, with its almost air-tight doors and windows and closed-up fireplaces, ventilation must be provided for in some other way. Where proper ventilators are not fitted into the walls, we must be careful to let in fresh air through doors and windows, whilst we give the foul air a chance to escape through the *top* of the windows, which should be kept open half-an-inch for this purpose. It is always safe to sleep with a bedroom window open half-an-inch at the top, and the door open as far, providing the bed is not in the draught between the door and window. By this means the air is kept fresh, and the occupants of the room will feel far more refreshed and wakeful in the mornings.

To some of our readers, the idea of sleeping with a bedroom window half-an-inch open may seem something very dreadful. We often hear people speak of the unwisdom of “breathing the night air.” Does it ever strike them that there is *no other air* to breathe at nights? No one in fair health need be afraid to let into their rooms a little night air. Of course common sense will guide us as to whether the atmosphere is too damp or foggy for us to sleep with the window open, which, in our variable climate, it will occasionally be. Even in this case, we need not quite close the door, nor yet the chimney.

A special word here on behalf of the children. It

makes one's heart ache to think of the thousands of children whose lives are lost, or who become so diseased as to make life a misery, simply because their young life-blood has been poisoned by sleeping in crowded rooms. It will always pay a working man in the end to give a shilling or two more per week for a house with an extra sleeping-room, if his family be large. It is far pleasanter to spend two shillings a-week *in the home* than *with the doctor*. And, in addition, there is the joy of feeling that the children are spared the probability of a sickly constitution as they grow older.

May we intrude a word too on behalf of the servants? How often, when we ask for a girl's character, are we met with the assertion, "She is dreadfully lazy; for we cannot get her up in the mornings, although we ring her." And, perhaps, if we could step upstairs to the bedroom the girl had occupied, we should find out the secret of her so-called laziness. The smallest room in the house—most likely an attic with very low and sloping roof—a tiny window not suitable for opening at the top, and no fireplace. This is the room the girl has shut herself into at night, and by morning the air is full of carbonic acid gas which she has been breathing during sleep. *No wonder she is too drowsy to wake up!*

But, whilst so anxious to admit air into our homes, we must take care that it has not been made impure before it enters. If it passes over heaps of decaying rubbish, filthy dust-bins, bad drains, dirty gutters and streets, it is pretty well laden with poison before it

enters the house. How is it possible, therefore, to have health in narrow, crowded streets where little or no provision is made for the daily removal of house-refuse? London will never be the healthy city it should be, while so many fearful dens of this description are allowed to remain in it. Let us hope that the intelligence, philanthropy, and legislation of the nineteenth century will shortly demolish the plague spots of our metropolis as effectually as the Great Fire of 1666 did.

8.—SANITATION.

By the term *Sanitation* we understand all matters pertaining to health.

We hear much in the present day about the sanitary condition of towns and houses. Three or four hundred years ago, this was a matter to which people gave very little attention. Their houses and habits were dirty, and streets narrow and filthy. The consequence was, that a much larger number died of dreadful diseases than at the present time.

But, when Science discovered that such diseases were engendered and spread by dirty houses and filthy streets, measures were taken to remedy such an unsanitary state of things. Though the process has been a very slow one, sanitary regulations and observances have gradually acquired more importance. There is a growing interest in the question of sanitation; but much yet remains to be done ere the principles of sanitation can be instilled into the

minds of the masses. Our great hope must rest with the children of our generation. If we can train *them* up to the principles of sanitation by introducing them more fully into our modern educational system, we shall do much towards improving national health.

Every town has now its Sanitary Officers, who are responsible, in a great measure, for the healthy condition of the town. There is usually a Sanitary Committee selected from the members of the Town Council. This Committee meets occasionally to receive the reports of the Town Surveyor, the Medical Officer of Health, and the Inspector of Nuisances. Each of these officials is at liberty to inspect any premises which they may suspect to be in an unsanitary condition. When they conscientiously do their duty, as many of them do, no house, nor street, nor building of any kind, which is occupied, is *allowed* to remain in an unhealthy state.

But we often find that not one-half the population of a large town is aware of the powers that are vested in the Sanitary Authorities of towns by the Public Health Act. Nor are they aware that the services of the three sanitary officers above-named are as much at the command of *all ratepayers* as at that of the Mayor and Council.

To explain this assertion. We recently saw a letter in a local paper from a lodger living in one of the most respectable parts of a town. His complaint was that, in the house in which he lodged, they were in danger of typhoid fever. "For," said he, "the sink in the scullery is in direct communication with

the drain, and the sewer gas from the w.-c. constantly treats us to a most abominable stench." He then went on to say that he had asked the tenant of the house why he did not have these matters attended to, and the reply was—"I should have to do it at my own expense, for the landlord has *positively refused* to do it." Evidently this tenant was ignorant of the fact that the Sanitary Authorities of the town could *compel* the landlord to do it. All the tenant has to do in such a case is to send a note to the Town Clerk, stating that the house he rents is in an unsanitary condition, and requesting the Inspector of Nuisances or some other official to inspect it. The request will, or at any rate *should*, meet with immediate attention. The case will then be brought before the Sanitary Committee, and, if conscientiously attended to, the landlord will be informed that "it has been represented to the Sanitary Authorities that a certain building, or part of a building, situate at ——— Street, and of which he is owner, is unfit for habitation; and that, unless he can prove to the contrary within a certain time, the Sanitary Authorities will, in pursuance of the powers conferred upon them, direct that until such building shall have been rendered fit for habitation, it shall be closed, and the use of it for human habitation prohibited."

The above quotation is copied in substance from the "Model Bye-Laws issued by the Local Government Board for the use of Sanitary Authorities." It is inserted in the hope that it may meet the eyes

of many who were not before aware of the very simple method of dealing with unprincipled landlords, whose only trouble about their property is to ensure a high rent for it, whatever its state.

It is generally in old property that defective sanitary arrangements are found. The Public Health Act of 1875 empowers all town authorities to make bye-laws with respect to the construction of new streets and buildings in such a manner as to ensure the health of towns. Should the Town Surveyor report that any house is being built without due regards to the laws of health, the authorities have power to stop the building of such a house. But although these precautions are taken with regard to new property, some of our large towns will never be as healthy as they should, until much of the old property they contain is pulled down. We can only hope that, when the question of re-housing the London poor has been fully solved, hundreds of old houses in the courts, alleys, and streets of our great capital will be entirely demolished. We may then expect cholera, small-pox, and fever to die out, mainly through want of *suitable lodgings*.

However much sanitary laws may do *for* the people, very much remains to be done *by* the people themselves. Cleanly homes—cleanliness of the person—proper food and clothing—occupation—temperate habits—are laws of health which are under our own individual control, and we cannot be too fully alive to their importance.

A house is in good sanitary condition, as far as the

building is concerned, when no nuisance of a kind detrimental to the health of its inhabitants exists in it. But the best of houses may become unhealthy through dirty habits and utter disregard of cleanliness on the part of their inhabitants.

9.—CLEANLINESS OF THE HOME.

A dirty home cannot be a healthy one; for where there is dirt, there will be impure air.

Our modern method of furnishing is calculated to harbour dust and dirt, and to cause us endless trouble in keeping clean. Thick carpets, upholstered furniture, thick woollen curtains and table-covers, are all so well adapted for the collection of dust, dirt, and insects, that, unless we constantly wage war against them, our homes soon begin to smell "stuffy." It is pleasing to note that there has been a marked inclination, during the last few years, to go back to the older style of stained floors and cane or rush-seated chairs. They are certainly more cleanly, and, therefore, more healthy. If we cannot bring our minds to dispense with carpets entirely, it is better to have a room stained several feet from the wall all round, and a carpet in the middle. The stained part can be dusted daily, whilst the small carpet can be taken up much more frequently than a large one and well shaken, the boards under it being scrubbed at the same time.

There is a very great difference between *looking*

clean and *being* clean. The simple removal of all dust from our furniture and rooms daily, with a little extra polishing and scrubbing on Saturdays, may make our homes *look* tolerably clean. But what of all the so-called "holes and corners" in a home? Spiders *will* find their way into the corners; dust *will* gather on the ceilings and walls; it *will* creep into the folds of our curtains, rest on the ledges of the doors, and intrude itself into our drawers and cupboards. Old rubbish of various kinds—rags, shoes, and clothes—*will* accumulate, and dust and mould gather upon them if allowed to remain! No, no! our homes are *not* clean, though on the surface they may *appear* so, if the "holes and corners" are left to look after themselves until "spring or autumn cleaning." We must *keep* them clean, rather than *make* them clean *occasionally*. Besides, the longer such things are neglected, the more impure the air of the house will become.

A dirty home will spoil the best of tempers, and make everyone in it grow fretful and peevish, simply because it is uncomfortable. As long as dirty homes exist, publicans will thrive. Can women reasonably expect men to stay at home in the evenings, after a hard day's work, if their homes are dirty and uncomfortable?

Home-cleanliness is such a *cheap luxury* that everyone may have it. The poorest home may be perfectly clean. In fact, we have often found a poor home, in which everything depended upon the wife, much cleaner in reality than a better one, where the

matter of cleanliness was left, perhaps, to a not over-conscientious servant.

It would be beyond the province of this little book to enter into the details of household work. Something pertaining to it *may* be learned from books, but, after all, Experience is the best teacher.

10.—“DUST-HO !”

The familiar cry of “Dust-ho !” which we hear in the streets of our large cities and towns, carries our thoughts to the dust-bins.

Dust-bins are great conveniences, no doubt. But they often prove to be *great evils* in the hands of injudicious housekeepers ; much *too* convenient, in fact, for purposes of health.

Let us follow, in imagination, a London dustman, and stand by while he brings out the contents of the dust-bins from several houses in an ordinary street. Here he comes, right through the houses and out at the front doors ! (There is no back entrance to many London houses !) The unpleasant odour, which we detect as he comes out, has been carried through the houses. Surely there should not be such a disagreeable smell from coal ashes and dust, which dust-bins are *supposed* to hold ? As the dustman empties his pan into the cart, let us see if we can find out the cause of it. Ah ! we have not long to look before we see what it is. Bits of meat, bones, potato-parings, cuttings of greens, cabbage stalks, tea-leaves,

dirty old rags, form the chief contents of the dust-bins, and go to make up the fearful stench when the bins are emptied. These animal and vegetable substances have been decaying whilst lying in the dust-bins. All decaying organic matter produces poisonous gas, which escapes from it and poisons the air around. Yet people are so careless, or, it may be, so ignorant, as to throw such things into the dust-bins close to their homes! Dust-bins were never meant to be machines for manufacturing fever.

What then is to be done with all house-refuse in the form of vegetable cuttings, &c.? Those who live in the country can readily use up bits of meat, potato-parings, and similar things for feeding pigs; or a refuse-heap can be kept some distance from the house, and in spring-time used up for gardening purposes. But in town houses, where there are no such means of disposing of them, they should be burnt in the kitchen fire, after being dried for a time under the grate.

Rags and bones should be kept separate, and sold to the rag-merchants. If the bones are boiled for a time, they will be freed from all matter likely to decay, and will not become offensive if kept for some days. We shall have more to say, later on, of the use to which bones may be put before selling them.

It would be well if the sanitary arrangements of all towns provided for the *daily* collection of dust and house-refuse, especially in the more crowded districts. A zinc or galvanised iron pail of ordinary size might be kept in each house for the purpose of

holding *all* that would go to the dust-bin. If the contents of the pails could be collected by dustmen every day, dust-bins might be almost dispensed with, and fever would lose another friend.

While we have bins, let us see to it that they are kept as clean as possible, and the frequent emptying of them attended to when we hear the call of "Dust-ho!"

11.—HOUSE-CLEANING.

However clean she may keep her home, no good housewife feels contented without the usual spring and autumn cleaning.

When spring comes, we feel that our winter's fires must have made sad work with our ceilings, walls, carpets, and floors, whilst the weather has been unfavourable for much scrubbing of floors or beating of carpets. So we long to have what is popularly styled "*a thorough turn-out*," so that our homes may be clean, sweet, and healthy for the summer.

Some people make house-cleaning a very troublesome and uncomfortable undertaking, simply through *want of method* in carrying it out. They seem to have an idea that, when cleaning commences, every room in the house must be turned out at once, and that all members of the family must make up their minds to live in a state of discomfort until it is over.

Our first thought in *spring* house-cleaning must be to have the chimneys swept in those rooms which

have been most in use during winter. For this purpose it will be found necessary to *turn out* such rooms first, if not to clean them. It would be useless to begin cleaning and scrubbing with the probability of soot flying about the house afterwards. When chimneys are swept, we may then begin to "clean down," as our Yorkshire friends would expressively say—that is, begin at the top of the house and clean downwards to the bottom.

Work should be so arranged that bedroom floors may be scrubbed rather early in the day, so as to be thoroughly dry before bed-time. Carpets, blankets, and curtains should be exposed to the fresh air during the middle of the day, in addition to being well shaken and beaten. The fresh air will purify and sweeten them. Boarded floors need careful cleaning; the water used should be changed frequently, and the boards must not be made too wet. A badly cleaned floor, in which dirty water has been allowed to dry, will make the air of a room impure.

Spring-cleaning time is also the time for papering and whitewashing any parts of our homes which need to be done.

With regard to papering. We must *never* allow a new paper to be put on over the old one. *It is a dirty, unhealthy practice.* The smell arising from a wall with five or six papers, one over the other, is often most intolerable; yet the walls of the room are the last thing suspected of emitting such odour. Again, a careless paper-hanger will sometimes use very foul size to mix with the paste used. Many

a fever has been caused by this carelessness. When, from the smell in a newly-papered room, we discover that the paper-hanger has been guilty of this error, it will be advisable to have the paper torn down again, and the wall scraped and cleaned before putting on another. "A word to the wise is sufficient," so we scarcely need add, let a *conscientious* paper-hanger put on the next paper.

It is well to be careful in our selection of papers. Those with green colours in them often contain arsenic, which is a deadly poison. The presence of arsenic may be detected by wetting the green part of the paper with a little water in which a small quantity of ammonia is dissolved. If the paper contains arsenic, the green will change to a bluish-yellow colour.

Ceilings are, as a rule, *whitewashed*. But for all cupboards, pantries, cellars, and out-houses, it is better to use *limewash*, as lime is a powerful sweetener and disinfectant. Any lime left in the pail may have more water put to it and be poured down the drains to sweeten them.

Spring is also the time we generally choose for painting the woodwork of our houses. To many the smell of paint is intolerable. If a pail of water be placed in a newly-painted room, it will take away the smell, and also be a capital proof to us of how soon water becomes contaminated by surrounding influences.

Our periodical cleanings often seem a great task to look forward to. But the luxurious satisfaction

which follows them far outweighs the labour they cost. Even those members of our families who have not at all enjoyed the "turn-outs," seem to become wonderfully *good-tempered* in participating in the comfortable, healthy feeling which surrounds them in a thoroughly clean home. The little inconveniences they have been put to are soon forgotten.

12.—PERSONAL CLEANLINESS.

We may have our homes in a good sanitary condition—well-built, well-drained, well-ventilated, and scrupulously clean—but if we lack personal cleanliness, we are still exposed to ill-health and disease. Dirty people are not aware of the many diseases that are due to the *want* of cleanliness, or the *practice* of it would be more universal than it is at present.

In order to explain fully the necessity of personal cleanliness, let us look for a moment at the skin, and the functions it has to perform with a view to the health of the body which it covers.

The skin is full of millions of little holes or pores, through which the "sweat-glands" throw off perspiration. When we are in health, at least two pints of perspiration are thrown out daily from the body through the skin. We cannot always see it, but increased exertion will cause it to come out quickly, and run down our faces and bodies. What is the purpose of this perspiration? Simply to carry off impurities from the blood. Amongst other matters,

it brings out a certain amount of that deadly poison, carbonic acid gas, which we previously noticed as being thrown out also by the breath.

Now it requires very little reasoning to conclude what must be the effect upon the body if these millions of pores become literally choked up with dust and dirt. The perspiration cannot escape, and is thrown back, *with all its impurities*, upon the blood, which carries the impurities back to the heart, lungs, liver, kidneys, and bowels, each or all of which will finally suffer—*become diseased because the skin has failed to do its part in helping them to keep healthy!* Or perhaps the impurities thrown back upon the blood will force their way through the skin in the form of blotches, sores, or skin disease! Surely these startling facts should *frighten* dirty people into cleanly habits, though we may fail to convince them of the unpardonable vulgarity of being dirty!

It is not enough that those parts of the body which are most exposed (hands, arms, face, neck) be kept clean; for *every* part of the skin perspires, and needs frequent cleansing. The lack of a bath in many households is *no* excuse for being dirty. Water is plentiful, soap is cheap, and the time needed for sponging the body all over with soap and water occupies only a few minutes. Thus the luxury and healthiness of a clean body are within reach of *all*.

Children cannot be too early impressed with the necessity of cleanliness. They should be trained to love it, and to feel miserable without it. It is cruel—nay, sinful—to *allow* children to be dirty. Their

maturer life's health depends upon the purity of their childhood's blood in a very great measure.

Just a word or two on behalf of the *babies* as well as the children. There is nothing so beautiful in this world as a plump, healthy, clean baby. Helpless as they are, babies can do nothing for themselves towards being clean. And their tender skin is so sensitive as to become easily broken and sore, if dirt be allowed to remain on it. It makes a mother's heart ache to think of the hundreds of dear, helpless babies among the wretchedly poor of our great towns, whose skin becomes diseased, and who ultimately pine away and die, for want of cleanliness.

Frequent change of clothing is almost as important as cleansing the skin. The clothing worn next the skin absorbs the perspiration, and, of course, absorbs its impurities too. Now, although the skin gives *out* so much in the form of perspiration, it has also the power of absorbing, or taking *in*, a great deal; so much so, that an invalid unable to eat might be nourished through the pores of the skin by being placed in a milk bath frequently. Medicinal substances are often absorbed into the body by being laid on the skin in the form of ointments. Just so the skin absorbs impurities, and if the clothing be not frequently changed, those which the perspiration has thrown out will be again absorbed into the system.

Those whose occupation causes the skin to get very dirty, and also to perspire freely, should pay strict attention to cleanliness of the skin and clothing.

When all our cities and towns are well supplied with public baths, of which the working population may freely avail themselves, another great step will have been made towards the promotion of National Health. This step gained, the next will be for benevolent effort to *convince* the masses how essential personal cleanliness is to the preservation of health.

13.—PROPER CLOTHING.

If we would preserve health, we must be—not merely clothed, but properly and sensibly clothed. It is one thing to be *dressed*, but to be *clothed* is different.

In perfect health, the body maintains a certain degree of heat. When that natural temperature is exceeded, we become feverish; when diminished, we shiver, and take cold.

Whilst the *form* of our clothing varies with fashion, its *purpose* remains the same—namely, to keep up the natural heat of the body. This purpose is best insured by wearing woollen garments next the skin, especially in winter, when the body is more exposed to cold. In our changeable climate, great discrimination should be exercised in changing our clothing to meet the varied weather.

To put on warmer clothing *after* winter has thoroughly set in, shows great want of caution in preserving health. We should be wiser than to allow a severe cold to remind us that it is time to

put on warmer clothing. The best plan is to be prepared to *meet* the winter's cold by gradually clothing ourselves more warmly as the weather becomes gradually colder. Equal caution is necessary in leaving off our winter clothing. It should be left off very gradually. Many colds, inflammations, and rheumatic pains would thus be avoided.

Children are often most insufficiently protected from the weather—sometimes with a view to “making them hardy.” No wonder so many children die of croup and bronchitis, or grow up predisposed to chest and lung diseases! Let the children be warmly clothed, to protect them from the cold, while loosely clothed, to give their muscles free play. What is more distressing than to see a child of seven or eight years old *pinched up in stays*, in its ignorant or foolish mother's anxiety to make it grow up “a good figure”? We are shocked at the cruelty of Chinese mothers in binding up their children's feet to prevent them growing. But it is more than shocking—it is *humiliating*—to find English mothers guilty of still greater cruelty. For, when English children are bound up in stays, the growth and action of their *vital organs*—heart, lungs, liver, &c.—are impeded!

The clothing of the feet is a matter of highest importance to all. They must be kept warm and dry. It is highly prejudicial to health to sit in damp boots. Many an attack of neuralgia and rheumatism may be traced to this cause. Old people and children often suffer from cold feet, and

should wear woollen stockings, except in the hottest weather. Young babies often have their little feet most inconsiderately exposed to the cold. We often meet them in the streets, in their nurse's arms, with their helpless limbs dangling down, and their feet encased only in small woollen boots, which are not very thickly made. Thus their feet must literally hang until they become almost frozen. And mothers wonder "why baby had such a restless night, and seemed almost doubled up with pain." Would not grown-up people, too, feel similar effects if compelled to expose their feet to the cold for several hours a-day without moving them?

Another very fruitful source of cold is, putting on additional warm clothing for a walk, and taking it off immediately we return. We become warmer while walking, and when we divest ourselves of our extra outer garments the moment we cease walking, we chill, and take cold.

The careless practice of putting on *damp* clothing cannot be too strongly condemned. It has caused many fatal illnesses. We must not trust to our laundress to air the linen, but see to it ourselves. *All* mothers should see to the proper airing of their children's clothes. It is not safe to trust to nurses for the airing of them. Very few nurses are as particular as they should be in this respect; and no doubt many young children would be spared an illness by scrupulous attention to the airing of their clothes. It is not enough that we simply air our linen—*everything* should be aired. Dresses, and

coats, and boots cannot safely be put on without airing (especially in winter) if they have not been worn for some days. Damp, as well as dust, *will* find its way to things that are stored away for a time. If people *will* put them on without airing, they have no right to complain if they take cold.

14.—OCCUPATION.

It is everyone's duty to be occupied in some way or other; for neither man nor woman was created for the purpose of leading an idle, useless life. Idle people are a discredit to their race, and mere cumberers of the earth.

Apart from its moral obligation, occupation is highly necessary to the maintenance of health. The best-constructed machines become rusty if not used; and just as surely will the body become diseased if not occupied. Its construction is such as to demand frequent action of every joint, muscle, and organ which it contains; and if any are left unused, they become literally useless.

Circumstances, rather than choice, often determine our occupation for us. The poor man must work to live. The rich man need not earn his living, still he needs occupation. Many find it in seeking the good of their country and fellow-creatures. Amongst these, we may class our statesmen and politicians—benevolent men and philanthropists—all of whom find occupation in bettering the condition of their country

and its people. They work—and work hard—and to their energy those who earn their bread by the sweat of their brows are indebted for the favourable circumstances under which most of them earn it. They have worked to get better workshops built, to get the long hours of labour shortened, and to raise the condition of the working man generally.

But while it is very essential to health that we be occupied, there are many trades which are in themselves unhealthy. From our previous remarks on "Fresh Air," it will be seen that those who work in crowded, ill-ventilated workshops must suffer in health. So also must those whose trades necessitate the handling of poisonous substances. Workers in lead, such as plumbers, type-founders, or painters, often suffer from paralysis of the muscles of the arm. Wax-flower makers are in danger of suffering from the poisonous colouring-matter of the wax they handle. Those who are employed in filing or grinding cutlery are peculiarly liable to chest diseases, on account of the inhalation of steel-dust. Millers often suffer from asthma; bakers from skin disease.

But the mortality amongst those working in such trades is not so great as formerly; for legislation and invention have stepped in to check it. There is now constant legal supervision of workshops and factories, and every working man has a right to complain if he finds himself located in an unhealthy workshop. The sanitary laws reach workshops and factories as well as private dwelling-houses. Invention has given miners their Davy-lamp, grinders their

magnetic respirators for use during work, and many other appliances for the purpose of protecting health. But of what avail are these inventions, if they are carelessly neglected by working men themselves?

Many of those who are liable to disease on account of the materials they work in, owe much to their want of personal cleanliness. We have already shown how readily the skin absorbs poisonous matters. How necessary, then, that working men should be *most* particular as to cleanliness. It is useless to *see* danger without taking means to *prevent* it.

Formerly, great danger to health arose from the very prolonged hours of work, and also from the employment of very young children in factories. Legislation has removed these dangers to a very great extent. Happily for the children, the law demands that they shall be *educated* up to a certain standard before being *employed*. We only wish it made better provision for their thorough education in the Laws of Health. It would thus give them an opportunity of growing up sound in mind *and* body, and turn them out from school to occupation with a stricter regard for health and morality. We must instil into the minds of the *children* the rules which should guide their conduct through life, if we wish our nation to be a healthy one.

15.—REST AND RECREATION.

A due amount of rest and recreation is as essential to health as occupation. If the body were kept too long at work, the sense of fatigue would become so great that nature would sink under it. Those who keep horses tell us that they find it much cheaper in the end to give their horses a proper amount of rest, rather than to work them hard every day in the week. If overworked, they lose appetite, and thereby strength and spirit. They become thin and dull, and die much earlier than horses which have been allowed rest.

It is just as possible to shorten human life by overwork, either of body or brain. For if the brain be overwrought by study or anxiety, it tells terribly upon the body in time.

The amount of rest we require varies with the degree of labour we perform. An industrious man earns his rest; whilst an idle man may almost do without it, in the sense of a restorative to tired nature.

As a rule, we rest awhile many times a-day. Taking our meals, for instance, gives us opportunity for rest. But when night comes, "Nature's sweet restorer, balmy sleep," gives us rest both of mind and body. Then "one day in seven" is set apart for rest, and thus we have another means of freeing our bodies from the sense of fatigue that the week's labour has entailed.

Again, we live in an age of much brain-work. We do not refer merely to that performed by men of

learning or students, but to the mental worry to which business men are exposed in their efforts to battle with keen competition, and to "grow rich." How many of them break down in health through making haste to be rich! They tell us they have no time for anything but business—scarcely time or inclination for sleep. Sometimes they make money enough to satisfy them, and then die; oftener they die before they grow rich—martyrs to their own lack of common sense! For would it not have paid them better to have driven a little slower along the road to fortune? Health is a more precious treasure than wealth, and it becomes sinful to destroy the one, by denying the body rest, in the eager pursuit of the other.

While we have occupation and rest, it is necessary to health that we have recreation also. Recreation partakes of the character of both work and rest. It implies cessation from ordinary labour and employment of mind and body in a way calculated to rest and amuse. The pleasure of recreation can only be purchased by labour. The idle, or those who live in a constant round of so-called pleasure, can never know what real recreation is. It is a pleasure—*an active rest*—enjoyed only by those who work, and enabling them to retain the power of working.

Circumstances must determine the kind of recreation we indulge in. But, generally speaking, it should be of a kind calculated to give complete change of scene and action from our daily labour. Those who sit much at their labour, such as clerks,

tailors, dressmakers, should find their recreation in out-door exercise, more particularly in walking. Those whose labour gives them much bodily exercise in the open air, may indulge in some quiet amusement at home, good reading being perhaps the most enjoyable and profitable. Our recreation should employ those powers of mind or body which our labour leaves unused, and thus a healthy condition of all of them will be maintained.

Recreation must not be too prolonged, or its great object will not be achieved. Little children are often compelled by careless nurses to walk twice as far as their strength will allow. It is no uncommon thing to meet children in our streets being dragged along by cruel nurses, and crying bitterly from sheer fatigue. *Proper* exercise is highly important to the health of children. We can but deplore the condition of those who are denied it. Great strain is put upon the mental capacities of children in the present day; and when exercise is neglected, the body soon suffers—becomes stunted in growth and ill in health. Gymnastics, swimming, sports of various kinds, do much to counteract the tendency to ill-health which increased mental exertion induces. But the *girls* as well as the boys should be allowed to participate in such recreations to a certain extent. Most of them *may* be carried beyond propriety by girls, it is true; but it is easy to draw the line for them, and say, “thus far, and no farther.” Most of our girls would be none the worse for an occasional romp with their brothers at home; nor would we

accuse them of being "unladylike" on account of it. Certainly it would not be ungirl-like, and decidedly not unnatural.

16.—PROPER SUPPLY OF FOOD FOR CHILDREN.

Health cannot be maintained without a proper supply of food. Work, exercise, breathing, and perspiring wear out the body and weaken its natural force as constantly as they go on. The fatigue which follows exertion, the exhaustion felt after hurried breathing, and the weakness induced by profuse perspiration, all go to prove this fact.

A proper supply of food is the means by which the weakened powers of the body must be restored. The food we eat for this purpose must supply materials for making flesh, bone, nerve, muscle—in fact, every constituent of the body.

Owing to greater exertion, industrious people wear out their bodies much quicker than those who are indolent; therefore they require more food. We often find indolent people who are fond of eating; and, in order to gratify this fondness (we cannot call it real appetite), they take highly-seasoned foods and sauces, and most likely an undue amount of strong drink, in order to "sharpen their appetites." This amounts to a very improper supply of food in their case; and they often pay dearly for the surplus by having a sharp attack of gout, or some other painful illness. Such cases occur amongst the rich

rather than the poor. The late Dr. Abernethy used to say that the best prescription he could give to some of his rich patients was—"Live on sixpence a-day, and *earn it.*"

It is impossible to lay down any strict rule with regard to the exact amount of food each individual should eat. Constitutions differ; some occupations wear out the body quicker than others, and—perhaps some of our readers may add—*means* vary very much. But we need not be expensively fed, in order to give the body a proper supply of food.

Young children and old people require less food than those in youth and middle age. It is also essential that their food be of a light and easily-digestible kind.

Milk is a young child's natural food. A child should be nursed by its mother for at least the first nine months of its life. Of course there are exceptions to this rule; for when a mother is in very delicate health, it may not be advisable, either for her child or herself, that she nurse it. But when a mother is strong and healthy, how unnatural it seems for her to allow fashion or prejudice to interfere with the performance of one of her most sacred duties! Milk contains all that is necessary for the support of life, and should form the chief food of children until they have passed the period of "teething," as well as enter largely into their dietary up to the age of seven.

Infants cannot masticate food until they have teeth; therefore it stands to reason that no solid food,

which certainly requires chewing, should be given to them. Young infants cannot digest starchy foods, such as corn-flour, arrowroot, potatoes, &c., and also many of the "so-called patent foods for invalids and infants," which are composed very largely of starchy matters. An infant fed upon such foods would probably look fat, but decidedly not healthy; for its flesh would be "flabby," and its bones become "rickety." If fed on such foods without the addition of milk, a child would soon die for want of nourishment.

It is highly important that the milk upon which young babies are fed should be the best obtainable. The milk of young, healthy, grass-fed cows is the best that can be given. It should be mixed with warm water, in the proportions of two-thirds of milk to one-third of water, and sweetened with good sugar. In large towns, good, pure milk is not so easily obtained. The Swiss condensed milk will be found far preferable to poor cows' milk for infants' food. Care must be exercised to avoid the very common mistake of giving too large a quantity at once. When an improper supply is given, the stomach cannot digest it, and the milk turns into solid masses of curd. Half-digested milk is a frequent cause of convulsions in babies. Unless a mother attends to her baby's feeding herself, it is often left to the care of a nurse, who finds the bottle a great convenience "when baby is cross." So baby often gets treated to two or three meals at a time instead of one, and its health suffers accordingly.

54. *Proper Supply of Food for Children.*

As children get their teeth, their food should gradually assume a more solid form. Milk puddings of various kinds should be allowed them, but no meat. A piece of stale bread (*by no means new*) dipped into good gravy, and cut into very small pieces, is often much enjoyed by a young child, and affords excellent nourishment. A little well-mashed potato may be substituted for the bread occasionally, though it will not afford the same amount of nourishment.

When a child has its full complement of teeth, meat may be allowed once a-day. It should be hot, if possible, and accompanied by a liberal supply of good, nourishing gravy. The child should be taught to masticate the meat most thoroughly. The habit of "bolting" the food is often formed in childhood, for want of careful watching, and retained through life, much to the detriment of health.

Of the value, throughout childhood, of a basin of bread and milk, or a plate of well-made oatmeal porridge, for breakfast, we cannot speak too highly. The porridge should be well boiled, and free from lumps, or the children will take a dislike to it.

Care should be taken not to overload the stomach in childhood; and, for this reason, the common practice of giving children sweets, cakes, &c., between meals is greatly to be condemned. If hunger really demands something between meals, either a piece of plain bread-cake, or a thick piece of bread with very little butter on it, will be the best thing to give.

Regularity in meals is very conducive to the

health of young children. We seldom find children suffering from indigestion when regularity is combined with propriety in the administration of their food. Children digest their food quickly when it is of a proper kind; and if not supplied with it at regular intervals, their digestive organs become weakened through want of action. Good and proper food, supplied with great regularity, goes a long way towards maintaining the health of children.

17.—PROPER SUPPLY OF FOOD IN YOUTH, MANHOOD, AND OLD AGE.

Leaving infancy and childhood, we pass on to notice the food of youth and more mature age in its relation to health.

From fourteen to twenty years of age is the period during which the body makes most growth. Thus the food is called upon to serve a double purpose during those years. It must not only repair the daily waste of the body, but it must also make provision for its rapid growth. Under these circumstances, it needs no argument to prove that the food of youth should be of the most nourishing kind, and by no means stinted in quantity. What would be the effect upon a growing youth if poorly fed, both as to quantity and quality? Simply this. He would grow up almost incapable of any muscular exertion, for his muscles would expand in growth, but remain undeveloped in power for want of proper

nourishment. He would look pale and thin; and his legs would seem almost incapable of bearing his body, light though it be. For not only muscles, but bones, would remain in an undeveloped condition. All his digestive organs would grow weak, his blood poor; most likely heart and lungs would ultimately suffer, and the youth would become a delicate man, should he live long enough to reach manhood.

How necessary it is, then, that growing youths should be well and properly fed. It rests chiefly with mothers to see that they are so fed. Will the mothers who read this little book pardon the mother who writes it, if she ventures to insert here a few lines of friendly advice, which may help them to do something towards the proper feeding of their growing children?

First, then—Never begrudge payment of a large milk-bill every week; let the children have as much as they like if your means will allow. Secondly—If you cannot already do it, learn to make delicious oat-meal porridge, which the children will enjoy at least once a-day. Thirdly—Do not be afraid of the trouble of cooking; but endeavour to give the growing children not merely food, but *variety* of food, cooked in the best possible manner.

In more mature age, the quantity of food required depends upon the amount of wear and tear which the body is called upon to bear. The same rules as to quality and regularity should be observed in all ages; but in the most active part of our existence, from early manhood to the decline of life, common sense

must guide us in the choice and quantity of our food. It is during this period that we are most liable to suffer acutely from errors in diet.

When old age creeps on, the diet should be more sparing in quantity, and of a very light, digestible, and yet nourishing kind. Milk, eggs, soup, broth, and various kinds of milk puddings are the foods most suitable. Let us not forget, too, that the aged require food more frequently than those in middle life. They cannot digest so much at once, therefore "a little and oftener" must be their rule.

18.—TEMPERANCE.

Temperance is one of the leading topics of the age in which we live. It engages the attention of high and low, rich and poor; and we are assured that England is fast becoming a more temperate nation.

But the chief form which the temperance question assumes is that of total abstinence from strong drink; therefore the title, "Total-Abstinence-from-Strong-Drink Societies," would be the more appropriate for the numerous so-called "Temperance Societies." We have Bands of Hope, Gospel Temperance Missions, and last, but not least, The Blue Ribbon Army, all of which have done a noble work towards the promotion of national health, inasmuch as they have been the means of reclaiming thousands from lives of wretchedness and vice, and therefore from ill-health. We only wish that some philanthropic lady friends would

organise a Red Ribbon Army for wives, every member of which should pledge herself to "look well to the ways of her household," and to have a clean, cheerful, healthy home and well-cooked food. This would be a *very* great step towards securing national health. We fear there will be many deserters from the Blue Ribbon Army unless it be supported by strong forces of Home Managers.

But the temperance which we would specially advocate here cannot be carried to the extent of total abstinence; for while we may live very well without strong drink, we could not exist long without food. At the same time, it is very essential to health that we exercise temperance in eating. It is commonly said, that while one-half the world has not enough to eat, the other half eats twice as much as is necessary. But it is not the former half alone that suffers. The ills arising from intemperance in eating are very numerous indeed. Those who habitually eat for eating's sake cannot possess "a sound mind in a sound body" so long as they indulge the habit. Let us reason why.

Digestion is the process by which the food we eat becomes changed into blood. During the process, all the digestive organs are called upon to do their part in effecting this change. But if, by overloading the stomach, we give them a greater amount of work than they are able to perform, they simply refuse to do it. Then the process of digestion is very imperfectly performed, the food we eat does not answer the purpose for which it is taken, and the whole

body, sometimes mind too, suffers accordingly. The diseases arising from indigestion are all of a most distressing kind. Biliousness, gout, rheumatism, and serious mental depression are among the most common ailments brought on by over-indulgence in eating and drinking. Let us remember, then, that enough is not only as *good* as a feast, but a great deal *better*, from a healthy point of view.

Again, Gospel Temperance enjoins us to be "temperate in all things." Should we not therefore be temperate in work—not overdoing it for the sake of gain? and temperate in recreation—not sacrificing health to pleasure? Should we not also be temperate in our ambition—not be too anxious to reach the top of the tree, lest our failure make disappointment all the greater? and should we not also be temperate in our desire for wealth—treading the path to competency with a firm, even tread, rather than *racing* along, only to find ourselves wrecked in mind and body when the goal is reached? What is wealth without health? Disappointment and anxiety of mind are terrible foes to health.

If, then, we be temperate in *all* things—in eating and drinking, in all our habits of life, in joy and grief, and all emotions of the mind—we shall preserve our health, and live a cheerful, happy life.

19.—OUR DAILY FOOD.

Good digestion does not depend solely upon the quantity of food we eat. Due regard must be paid

to its general wholesomeness, and its appropriateness to our individual requirements.

Since the various tissues of the body—bone, flesh, fat, muscle, &c.—are made up of so many different constituents, all of which must be supplied by the food we eat, it needs no further argument to prove that our daily diet should be a mixed one. It should contain *nitrogenous*, or, more simply speaking, *flesh-forming food*; *carbonaceous*, or *heat-giving food*; and also the *mineral matters* that are found in the blood.

Amongst our common flesh-forming foods we have—

Lean meat, poultry, and game.

Cheese.

Eggs.

Fish.

Peas, beans, and lentils.

Heat-giving foods are supplied by the following common articles :—

Fat meat.

Dripping.

Butter.

Sugar.

Treacle.

The mineral matters are supplied by—

Potatoes.

All green vegetables.

Bread.

Oatmeal.

Fresh fruits.

Milk is the only food which in itself combines the three kinds above mentioned. The curd of milk is flesh-forming, the cream warmth-giving, whilst the whey contains the necessary mineral matters.

If we were to deny ourselves flesh-forming foods, the muscles would soon relax, and become useless; to abstain from heat-giving foods would be like attempting to drive an engine without steam, for it is the heat within itself which gives *force* to the body. A lack of mineral foods would render the bones soft, and the blood impure. Phosphate of lime forms the hardening matter of bones. Salts of potash, soda, and iron are all found in the blood, which they help to purify.

Formerly, our sailors used to suffer dreadfully from scurvy during long voyages. Their chief diet at that time consisted of salt meat and hard biscuits—they never tasted vegetables. Now, every ship takes out a good supply of potatoes, and other vegetables which may be stored, and the disease is almost unknown among our sailors.

Having found out what kinds of food are absolutely necessary for the support and health of the body, our next step should be to consider what amount of each kind will best suit our own individual case.

A hard-working navvy requires a great amount of both nitrogenous and carbonaceous food; for he expends much heat and force during his great exertion, and also wears out his body quickly. On the other hand, those whose occupation is of a sedentary nature require far less force-producing food. If they

take too much carbonaceous food, it becomes stored up in the body in the form of fat, and produces unhealthiness. A young baby's bones are soft—almost like gelatine—and if, as it grows, it is not fed on food containing phosphate of lime, its bones will remain soft, and the child grow up “rickety.” The amount of phosphate of lime found in oatmeal is one of the chief recommendations of porridge for growing children.

Water forms a very large proportion of the constituents of the body. A good supply of it is necessary to health and life. A man could live longer without food than without water. It is found in all foods, but not in sufficient quantity to meet the body's great demand for it. Therefore it must be taken in some other form—either as a pure beverage, or mixed with tea, coffee, &c.; but in any form must not be taken to excess.

With so many foods of each kind at command, we should so far regard health as to eat only those kinds which we can most easily digest—or, to use a more common expression, “those which suit us best.” Some can eat mutton who cannot eat beef; some one vegetable, and some another; and so we might draw still further comparisons. But, after all, no one can decide for us so well as ourselves what “suits us best.”

20.—COOKING.

Cooking has a great deal more to do with health than many persons imagine. Good food may be spoiled, and indifferent food made worse, by bad cooking. Ill-cooked food spoils health and temper too.

The chief object in cooking food is, to render it more digestible, and thereby more promotive of good health. When food is badly cooked, this object is not accomplished. Take, for instance, a piece of meat. Unskilful cooking has made it dry, hard, and tough. Those who partake of it cannot masticate it properly, so it passes into the stomach in a state far from prepared for the process of digestion. A fit of indigestion follows, relieved only, perhaps, by an emetic; and thus the meat has done the body more harm than good.

Heavy, half-baked bread; boiled puddings, with a flour-and-watery-looking outside, and whose weight suggests a small cannon-ball inside; ill-made, badly-baked pastry; and many similar concoctions, which a bad cook passes off as "misfortunes," will all have the same effect upon the stomach as badly-cooked meat. There is no doubt, in fact, that a very large amount of ill-health in families may be traced to badly-cooked food.

What a responsibility rests, then, upon wives and mothers! In the face of it, who shall venture to assert that it is "undignified" or "unladylike" to be able to cook well? *Is it unwifely, unmotherly, or*

unwomanly? Is it beneath the dignity of any true woman to see that those nearest and dearest to her are properly fed, and, if necessary, to prepare their food with her own hands?

We may keep cooks, but we are very much at their mercy if they discover that we know nothing about cooking. A mistress has a wonderful power in her hands when her servants find that she "knows all about things, and can actually *do* them;" especially so, when she can give "the reason why" they should be done in a certain manner. It is every woman's duty to know how to cook well, even though affluence may excuse her from the actual performance of culinary work.

But it is to the wives of working men we would specially address these lines on cooking. There is no doubt that ill-cooked food, which is very unsatisfying, drives many men to take strong drink, in order to satisfy the cravings of hunger. At last the appetite for food grows weaker, and that for drink stronger, until the hard-earned wages nearly all go to the publicans and brewers, who often retire on a competency largely made up of money that working men should have saved for themselves and families.

In our large cities and towns, there are such facilities for purchasing "ready-cooked" food, that hundreds of working men's wives seldom cook a meal at home. Some do not know how to cook, and others do not care to have the trouble of cooking. If we could but convince them how badly they and their families are fed in comparison with

how well they *might* be, and how much more real nourishment they might obtain for the money spent on ready-cooked food, surely they would think it worth while both to *learn* to cook and to *labour* to cook at home.

It is very greatly to be regretted that the teaching of Cookery, and of the Laws of Health, is not made compulsory in our elementary schools. Many of the children attending these schools have no opportunity of learning such things in their homes; and, unless they *are* taught them somewhere, we cannot reasonably expect the next generation to be more healthy and moral than the present one. A girl will grow up to be a very poor housekeeper, however cleverly she may be taught to sew, if she be not instructed how to make home healthy, and how to cook food properly.

But without distinction of class, *every* girl should be prepared for a woman's duties, and every boy should be trained to know the value of temperance, cleanliness, and good general conduct. We see no reason why boys should not also know something about cooking. It would be of incalculable value to those who emigrate when older, for they are often thrown upon their own resources as regards the preparation of their food.

21.—PROPER NOURISHMENT WITHOUT LARGE EXPENDITURE.

“Meat is so dear that we can seldom have it,” is a general complaint we hear among the poorer working-classes. And because meat is dear, they have the impression that they cannot possibly be as well nourished as those whose means will allow them to spend a large sum with the butcher.

Now, as long as we English people consume so much meat, it is likely to remain dear. If we *will* tempt our butchers to charge what they like for it, by letting them see that we will have a large quantity at any price, who is so much to blame as ourselves for the high price of meat? As a nation, we eat far too much animal food; and as soon as we learn to eat less, we shall find both our health and purses benefited.

Many people regard meat as though it were the only really nourishing food. True, it appeases hunger more thoroughly, and satisfies for a longer time than vegetable food. But this is owing to its greater solidity, and to the fact that it stays longer in the stomach.

Our vegetable flesh-forming foods are very much cheaper than meat, and are all good and digestible when nicely cooked. Oatmeal, Indian corn, whole wheatmeal, peas, and beans are the most important of our vegetable flesh-formers. Let us compare them with butcher's meat in point of nutriment and price.

One and a-quarter pounds of good oatmeal, which costs on an average 3d., will give as much nourishment, and almost as much fat to the body, as a pound of uncooked meat, which costs 10d. or 1s. Bread and other preparations made from wheatmeal are highly nutritious. Wheatmeal bread worth 4½d. will supply the body with as much nutriment and force as 3s. 6d. worth of lean meat. Dried peas, beans, and lentils are far superior to meat in nutritive value. A pound of either will give as much nourishment to the body as three pounds of lean meat—the cost being only about one-seventh as much as the meat. But they are deficient in fat, and should be eaten with fat meat, bacon, or butter.

Thus we see it is quite possible for a labouring man's children to be as well nourished as a rich man's, although they may seldom, if ever, taste animal food.

But what about the labouring man himself? Can he work hard and keep healthy without animal food? Certainly he can, if his food consists of a variety of the above-named vegetable foods, with a due admixture of milk and fruits of various kinds. The labouring men in the North of Scotland live almost entirely on milk and oatmeal; and what a fine, strong race of men they are! Those of us who have vegetarian friends need no further proof of the sufficiency of a vegetarian diet for the support of life. They can work, walk, and endure much more than our large meat-eating friends, *and they never have the gout*, unless it has been transmitted to them from

their less careful ancestors. As a rule, they have a most healthy, wholesome appearance, which tells of pure blood and a sound constitution. In fact, many of them bear testimony to their improved health and vigour since they adopted vegetarian principles.

Why, then, should poor people mourn their inability to buy animal food? Or why should those in better circumstances continue to eat so much, when they would be really better in health with very little, or none at all? There is no reason why, except that, as a nation, *we dearly love our roast beef!* And if we had an animal-food famine, one-half the population would at once make up their minds they must die of starvation, just as they do in Ireland when there is a potato-famine. Or probably the sympathy of the whole world would be called upon to provide meat for "the starving people of England!" One cannot help feeling tempted to think that such a famine would do English people a great deal of good. It would certainly compel them to learn by experience how much money is unnecessarily spent on butcher's meat, and it would probably bring many to enjoy a feeling of good health, such as they had not had for years before. They would then be convinced that a large expenditure on food is neither essential to good nourishment nor to good health.

22.—MAKING THE MOST OF WHAT WE HAVE.

We fear there is much waste of food in our English homes, caused through the wives' lack of knowing how to turn things to account. We are not half as clever as our French neighbours in making the most of what we have. Everything that is eatable they turn to account. As a nation, they eat at least a third less meat than we do; and what they do eat is so well cooked that they seldom suffer from disorders of the stomach. Some time ago, a friend who had resided several years in France told us she had there seen a dozen poor people provided with a good dinner off what our English cooks would set aside as "a mere bone." The little meat there was on it was literally scraped off, and, with the addition of a few vegetables, a little stock, and flavouring, made into a delicious mince, which was daintily garnished with fried sippets made from odd pieces of bread. The bone, with some more vegetables, was gently stewed for some hours, and a light, nourishing soup formed the other dish which was made out of the "mere bone." How many starving English families might be fed with the bones and pieces of bread from the tables of the wealthy! The great trouble is, that the wives in most of our poor homes would not know how to prepare a hot, wholesome, nourishing, and healthy meal out of what they would term "scraps." In fact, they cannot cook anything

properly. How do we find them cooking a piece of steak, for instance, if we look in at their homes when they happen to have a piece? Either frying it hard in a pan, or toasting it dry on a fork in front of a small fire! And each member of the family is treated to a very small piece of unchewable meat, out of which all the nourishment has been *dried*! Is this conducive to health?

If we could but induce working men's wives to adopt *stew-pans* in place of frying-pans, how much better their families would be fed. Instead of having the occasional "bit of meat," which they deem a luxury, served up in a tasteless, indigestible fashion, they might have it deliciously stewed—tender as a chicken, plenty of good gravy, all the nourishment retained, and the small piece of meat thus made to go twice as far in satisfying appetite and sustaining health.

And so with every other article of food. Nothing should be wasted. Those who have small means should study how best to spend them, with a view to economy and health combined.

It is often very distressing to find how poorly many families are fed in our agricultural districts; where really good food abounds. Oatmeal is almost unknown amongst them; milk they can scarcely obtain, for, when the farmers have taken the cream for making butter, the skimmed milk is given to the calves and pigs! Some good farmers are more humane, and do not mind the little trouble of selling the poor labourers "a pennyworth of milk." If these

poor people could obtain a regular supply of skimmed milk, they would be much better nourished, and it would certainly be turned to better account than it is at present.

It would be a good thing for our agricultural labourers if they could be taught the value of wheat-meal bread. Whole families toil in gleaning during harvest-time, hoping to get flour for winter use. Venturing to inquire from some gleaners how much it would cost them to have their bundles of wheat ground into flour, their reply was, "Nothing at all; the miller keeps all the outings" (husks, bran, &c.) "in return for grinding." Now these good people were quite ignorant of the fact that it cost them a great deal to have their wheat ground upon such terms. *It costs them a great deal of nourishment*, for the bran left at the miller's contains more nutriment than the fine white starchy flour. Had it been very finely ground, and mixed with the white flour, the labour of gleaning would have been far more profitable to them, even though they had to pay a trifle for grinding.

Again, many herbs and plants which grow wild in our country, and which our French friends would turn to account, are quite overlooked by us. How many English people know that young nettles, stewed, pressed, mixed with a little pepper, salt, and butter, make a very delicious vegetable, served, like spinach, with toast? Also dandelion leaves, prepared in a similar manner? Or how many know that beer made from dandelion flowers and nettles forms a most

refreshing, cooling, and slightly medicinal summer beverage, at a cost of about threepence per gallon?

At present we have to draw very largely upon other nations for our supply of food, owing to our dense population. But should we have to draw as largely if we *made the most* of the food resources we have in our own land? England will grow more healthy and wealthy as her people grow wiser in this matter.

23.—INFECTIOUS DISEASES.

As stated in former chapters, some of the more virulent kinds of infectious diseases which formerly baffled all the medical skill in the land have been almost stamped out. Their origin has been traced, means prescribed for their prevention, and, when the great masses of the people learn and practise the laws of health, we may hope to make still further conquest over infectious diseases.

Measles is a highly-contagious disease, generally confined to childhood, but occasionally attacking adults. The disease in itself is not dangerous when it runs its proper course. The danger lies in the more serious diseases to which measles gives rise if not properly treated. Even in the mildest cases, great care should be taken to guard against cold; and, for this reason, it is better for the patient to be kept moderately warm in bed until the rash has been well out and has almost disappeared. A sudden chill, or taking cold, would prevent the rash coming out as it

should do, and the poisonous matter would be thrown back upon the blood with very dangerous results. The chest would be affected, and most likely inflammation of the lungs would ensue, unless very prompt measures were taken to prevent it. A warm bath is the safest remedy when the eruption does not come out in proper course, care being taken that the water is *kept* warm during the fifteen or twenty minutes the patient is in it. A warm blanket should be in readiness, in which the patient should be immediately placed to prevent a chill. Should any affection of the chest show itself, linseed meal or bran poultices should be applied. Mothers would do well to remember that children are very liable to chest diseases for some time after the eruption of measles has disappeared. Great care should be taken to protect them well from cold when they go out, special attention being paid to the chest. Many children suffer all their lives through neglect of this precaution after an attack of measles.

Scarlet fever is exceedingly infectious, and more fatal than measles. It is very desirable that mothers be able to distinguish the one from the other. In measles the eruption is of a dark red colour, and raised; in scarlet fever it is bright scarlet, and quite smooth to the touch. In measles it is large and crescent-shaped; in fever it is in small round spots, which disappear if pressed. In measles the face is swollen, and there is running from the eyes and nose; in fever the face is quite dry, and the tongue a fiery bright red, like a ripe strawberry. It is always

advisable to have medical assistance in a case of scarlet fever. The utmost care is necessary to guard a patient from taking cold, both during and after an attack. Dropsy often sets in after fever through carelessness in this respect. There is great thirst during fever, and often great difficulty in swallowing. The most refreshing drink that can be given is *cold water* — for a change, lemonade, apple-water, &c. Toast-water is also a very good drink. A case came under the writer's notice some years ago, in which a child had subsisted for a whole fortnight, during an attack of scarlet fever, on nothing but toast-water. Though the attack was not a very mild one, the child recovered, and speedily regained strength. When the heat of the skin is very great, sponging the body over with tepid water, to which a tablespoonful of vinegar has been added, will be both beneficial and refreshing. Care must be taken to do it quickly, and not to expose the patient to a chill.

Hooping-cough is a disease which will run its course in spite of all treatment. All we can do is to *take it in time*, and make an effort to lessen its severity by constant attention to the patient. In many cases the disease is comparatively mild, and medical advice is not necessary. The great dangers attending hooping-cough are inflammation of the lungs and convulsions. If the slightest symptoms of either show themselves, the doctor should *at once* be called in. In winter, especially during the prevalence of east winds, the patient should be confined to the

house. Numerous patent "specifics" are sold for the cure of hooping-cough, but we very much question the efficacy of any of them. We have in many instances proved the far greater value of simple ipecacuanha wine mixture, and the very old-fashioned home-made embrocation of garlic and rum. If anything can be said to really *cure* hooping-cough, it is a change of air, which should always be had recourse to in the later stages of the disease. It is a mistake to suppose that hooping-cough never attacks adults. We have known a mother have it quite severely at the same time with her children.

Ringworm and itch are very contagious diseases, seldom met with except amongst poor, ill-fed, and uncleanly children. They are terrible things to find their way into schools, and teachers in our Board and other elementary schools, where the children are largely drawn from poor neighbourhoods, should be exceedingly watchful lest ignorant or careless parents should allow an infected child to come to school.

Small-pox, which was formerly the dreaded scourge of our land, has been almost stamped out. In the ten years from 1856 to 1866, *fifty thousand* persons died in England of small-pox! It was found that a very large proportion of them had never been vaccinated. How figures have changed with regard to this dreadful disease since the Compulsory Vaccination Act was passed! Vaccination either prevents persons taking the disease, or, if it be taken, allays its severity and stays its fatality. It is the *only*

known precaution against small-pox. Is it not everyone's duty then to adopt it?

Cholera has almost disappeared since greater attention was paid to purity of air and water in our large towns. For a long time the origin of this disease baffled all medical research. At last it was believed to exist in impure water, and precautions were accordingly taken to supply towns with good drinking water. This has had a very marked effect in stamping out the disease, and has also led scientific men to make still further efforts to trace out the actual cause of it. The result is that, within the last few weeks, the true cholera germ has been discovered in the form of a minute insect which infests impure water. When once this disease is engendered, it travels with great rapidity, and an outbreak in any continental country should put us on our guard to prevent it landing on our shores. Or, if it should be accidentally brought in, we must take care that the little germ may not find any congenial resting-place in impure air or water.

24.—CARELESSNESS IN SPREADING INFECTIOUS DISEASES.

There is no doubt that the rapid spread of contagious diseases is due in a large measure to carelessness. Parents carelessly allow their children who have been affected to play with others, or perhaps venture to send them to school, before the danger of

communicating the infection is past. There should be very stringent rules in all schools with respect to the return of children who have suffered from infectious diseases, or who have been living in a home where any member of the family may have had an attack of any one of them.

Again, the poor are always willing to help each other in cases of sickness; but we often find them unnecessarily exposing themselves and their families to danger, by going into each other's houses during a case of infectious disease, when they cannot possibly be of any use. Of course it is every woman's duty to go where she is really needed in sickness, but she exceeds her duty when she unnecessarily runs into danger.

In our large crowded towns people are very much at the mercy of their laundresses if they be careless, ignorant women. They will not scruple to take clothes to wash from an infected house, and are by no means judicious in keeping them strictly apart from others. Or if their own homes have had an infectious disease in them, they are not honest enough to discontinue taking in washing for a time. It might be difficult for them to get on without the money they are accustomed to earn; but we feel quite sure their customers would not allow them to starve, on finding how conscientiously they had acted in refusing to do their usual work. We have heard and read some most revolting stories of London laundresses during epidemics of small-pox, fever, &c. Where it is impossible to have the family's washing

done at home, the greatest caution should be exercised in the selection of a laundress.

It has sometimes crossed our mind that, in a large city like London, the great facilities for travelling offer scope for the spread of disease. Probably some thoughtless person who has been nursing an infectious case, or who has one in her own home, thinks she would like a little change when her patient is "a trifle better"—thinks she will get out as far as she can, so gets into an omnibus, tram, or train, squeezes herself between the other occupants of the conveyance, quite unconcernedly, and regardless of the fact that she has on the clothes which she had been wearing in an infected sick-room. Is it not very possible, indeed, that disease is spread in this careless manner?

The question is often asked, "Do not *doctors* sometimes carry infection from one house to another?" It is very likely they do; and our ground for asserting this is, that we have known a doctor in ordinary practice refuse to visit a child with a slight attack of German measles (and who really did not need a doctor), simply because he was a salaried officer of a large school which he visited daily, and to which he was afraid of taking measles. This was certainly an admission that doctors *may* carry infection.

But we have surely said enough to convince our readers that the responsibility of spreading infectious diseases is a very *individual* one.

25.—MEANS OF PREVENTING THE SPREAD OF INFECTIOUS DISEASES.

Diseases of this kind spread so rapidly, that we cannot be too prompt in our efforts to arrest them. The little poisonous germs of disease float about in the air, attach themselves to various articles of clothing and furniture, and, unless they are by some means destroyed, the disease of which they are the cause will continue to spread.

Disinfectants are plentiful and cheap, and should be freely used for the purpose of destroying the germs. The most common amongst them are chloride of lime, carbolic acid, and Condy's fluid. The first-named is moistened with vinegar, and placed about a sick-room and house in saucers. The best method of using the fluids is to dilute them with water, in the proportion of one part of fluid to eight or ten of water; then dip old towels into the solution, and hang them about the rooms, taking care to hang one or two *outside* the door of the sick-room, as well as several *in* the room.

But the best disinfectant is *pure air*. The germs cannot exist long in sweet, fresh air; but when fed and fostered by an impure atmosphere, they generate very rapidly, and the disease spreads accordingly. This is why infectious diseases are always most rife and fatal in close, crowded, dirty neighbourhoods—the conditions of the air in such places being so very favourable to the growth of the germs. It is the greatest mistake possible to suppose that plenty of

fresh air from without should be denied admission into a sick-room. In fact, it is imperative in infectious cases that a *constant* current of fresh air be kept passing through the room. At the same time, care must be taken to keep the patient out of a draught.

Many, many years ago, it used to be thought necessary to keep fever patients closed up in hot rooms, into which the air was not admitted, except by accident when the door was opened. But fearful epidemics of small-pox and fever, from time to time, so filled the hospitals, that in several instances temporary sheds had to be put up, in order to receive more patients. They were by no means as air-tight as the hospital rooms, yet it was found that the patients placed in them recovered much quicker than those in hospital. No other reason could be assigned for this than the greater amount of fresh air which swept through the sheds as compared with that admitted into the hospital rooms. Since that time the subject of ventilation, in hospitals and sick-rooms generally, has become one of great importance, and with very satisfactory results.

We may admit fresh air, and spread out disinfectants, but much more remains to be done in order to prevent the spread of disease. *Cleanliness* is highly essential in a sick-room, for these terrible little germs will find their way into dust, cobwebs, water that has stood in the room any length of time—in fact, wherever there is impurity of any kind, there they will go. Everything used in a sick-room should be immediately disinfected, and carried away to be

cleansed. All articles of clothing worn by patient or nurse, all bed-clothes, towels and dusters, should be *immediately* plunged into abundance of water well charged with disinfectants. Very strict precaution should be taken to keep them quite apart from all other household and personal linen when washed, *not merely while the patient is ill, but for some weeks after apparent recovery.* A better practice still, and one which we strongly advise, is to let the patient use up all *old* articles of clothing and bed-linen, and *burn* them as they are changed. All bedding should be disinfected thoroughly—better still if it can be burned. Woollen and cotton articles are particularly attractive to the poisonous germs, therefore it is wise to remove carpets, curtains, &c., from an infected sick-room. Beds, carpets, sofas, and clothing, which have been in contact with patients suffering from an infectious disease, have been known to spread the disease six months afterwards! How necessary, then, to be exceedingly cautious!

A coating of sweet, fresh limewash on the ceilings and walls, or a new paper (taking care to remove every particle of the old one), is absolutely necessary to the thorough cleansing of an infected room; and the floor should be washed over with water in which chloride of lime has been dissolved, the day before it is scrubbed.

All drains, both inside the house and around it, should be frequently disinfected, so as to keep the air as pure as possible.

The great mistake many persons make is, that they

do not continue to take all necessary precautions for a sufficient length of time after the illness. The danger of infection is by no means over when a patient is apparently well again.

26.—WAITING FOR THE DOCTOR.

When waiting for the doctor, every minute seems an hour to those who do not know what to do until he comes. It is very unfortunate for a person in pain or danger to be surrounded by helpless sympathisers, especially when it may be that very prompt action is necessary to save life. We generally find that those who do not know what to do in a case of emergency, have made the patient much worse by losing their presence of mind, and looking unduly alarmed.

Mothers should make it their special duty to know what to do in the sudden illnesses or accidents to which young children are liable. Little lives often hang upon such a tender thread, that they break loose before the doctor comes, if mother does not know what to do.

We should be prepared for emergencies by having everything at hand that is likely to be wanted in a hurry. Sometimes a simple remedy promptly applied will prevent a long illness. A small drawer or box, which can be locked, should be set apart as a medicine chest, and kept supplied with a few simple medicines and remedies, which may be safely used until the doctor comes, when it is necessary to send

for him. Amongst the things most likely to be useful are a two-ounce bottle of castor oil, a similar one of ipecacuanha wine, one of tincture of arnica, a pint bottle of linseed oil and lime water, a pound tin of linseed meal, and a quarter-pound tin of mustard. Also a roll of old linen, another of soft old muslin, some long strips of calico and flannel for bandages, a little cotton-wool, some sticking-plaster, scissors, needles and thread, and a few pins.

Experience has also taught us the value of a few simple homœopathic medicines, which we keep in our drawer — camphor, aconite, belladonna, and nux vomica are amongst the most useful. Materials for a homœopathic throat-compress should also be at hand—a piece of flannel or linen which will wrap in two or three thicknesses round the throat, a piece of oiled-silk to cover it, and two or three thicknesses of flannel to cover the whole. The first flannel or linen must be wrung out of cold water before being applied to the throat. A bottle of sal volatile and a strong smelling-bottle will complete a very useful selection of simple remedies, which may be of great service when waiting for the doctor, or in prescribing for little ailments when his help is not required.

But it would avail us little to have our medicine drawer thus stocked if we did not also know how, and in what cases, to use its contents. It would be beyond the province of this little book to enter into a minute description of various diseases, but we will note a few cases in which it is necessary to act promptly.

Young children are very liable to convulsions while teething. When a child is seized with these, it is best to send for the doctor at once. It may be that the gums need lancing. In the meantime, place the child in a hot bath for about ten minutes, and, at the same time, keep its head cool by means of cloths wrung out of cold water. A hot blanket should be in readiness to receive the child when taken out of the bath. It is probable that this prompt treatment may bring the child round before the doctor arrives, but he will be able to trace out the cause of the convulsions, and very likely prevent a recurrence of them. They sometimes arise from improper feeding, and also from the presence of worms. A teaspoonful of ipecacuanha wine, mixed with sweetened warm water, should, if possible to get the child to swallow it, be given during the bath, and repeated in about ten minutes if the first dose has not induced vomiting.

Apoplexy and epilepsy come in most cases so suddenly, and are so often fatal, that the most prompt measures should be taken while waiting for the doctor. In fits of any description, the first thing to be done is to loosen all clothing, especially about the neck. Then apply warmth to the feet and legs, and cold to the head. Apoplexy may be known by the laboured breathing—almost snoring—the almost purple flush of the face, and the utter powerlessness of the limbs. Quickly loosen all clothes, raise the head and shoulders (taking care not to let the chin rest on the breast), give an emetic of mustard and

warm water, put cold water and vinegar cloths to the head, and hot-water and mustard cloths to the feet and calves of the legs, then all has been done that can be done until the doctor comes. In epilepsy there is convulsive working of the mouth and limbs. All we can do in this case is to loosen all clothes, and insert a piece of india-rubber, or a small towel doubled several thicknesses, between the teeth, to prevent the patient biting his tongue.

Fainting is a very common affection. In this case the blood ceases to circulate freely through the head. A fainting person should be laid down on her back, the head *level* with the body, *not raised*, as the object is to cause the blood to flow *back* to the brain, not *from* it, as in apoplexy. Plenty of fresh air, especially about the neck and chest, is essential to recovery. The smelling-bottle should be applied frequently to the nostrils, and, as soon as the patient can drink it, a restorative draught of half-a-teaspoonful of sal volatile in a wine-glass of water should be given.

Pleurisy and inflammation of the lungs often come on somewhat suddenly—the former sometimes when the body is in a weak condition from some previous illness. Hot-water bottles to the feet, thick linseed-and-mustard poultices to the side or chest, according to where the acute pain is, warm drinks, such as tea and gruel, and tincture of aconite administered every fifteen minutes in doses of one drop in a dessert-spoonful of water, will do very much to relieve the patient and avert imminent danger.

Croup is one of the most rapidly fatal diseases which affect young children. It is seldom cured if not taken hold of in time. It commences with hoarseness and short dry cough. The difficulty of breathing increases very rapidly—the child almost fighting for breath—and then the strange choking sound peculiar to croup is heard. Night or day, the doctor should be sent for *at once*. Until he comes, give the child doses of one or two teaspoonfuls of ipecacuanha wine in warm sweetened water, repeating the dose every ten or fifteen minutes until the vomiting comes on. Place a *thick* linseed-meal-and-mustard poultice over the chest and throat, and put the feet in hot water and mustard till the skin is red, and all will have been done for the sufferer that can be done without the doctor.

Common colds are a most fruitful source of many diseases, and should therefore receive immediate attention. "*Nothing but a cold*" is a very common expression; and yet, though treated so lightly at its commencement, a cold often ends in something very serious if it be neglected. When a person has taken cold, the best thing he or she can do is to put the feet into a hot-water and mustard bath for ten or fifteen minutes, then go to bed, and *stay there* till the cold is better, taking care to put an extra blanket on the bed. The great object is to induce perspiration, and thus bring out the cold. For this purpose, there is no finer, safer home remedy than the tincture of aconite mixed with water, as previously advised. It should be taken every hour at first, or, if the cold

be a very feverish one, every half-hour, until the action of the skin is restored, and at longer intervals as the cold diminishes. Copious draughts of cold water will aid the aconite in bringing out the cold. If the throat be very sore, the wet-compress should be applied. This prompt treatment of "nothing but a cold" will often save us from an attack of acute rheumatism, inflammation, or fever.

Mothers (more especially those who have *boys*) are often called upon to act promptly in cases of accidents. Blows and bruises may be prevented from becoming sore and disfiguring by a *prompt* application of arnica lotion. This should be made by mixing twenty drops of arnica in about half-a-teacupful of cold water. A piece of old linen dipped into it should be applied to the bruise, covered with flannel, and, if possible, secured with a bandage. This is also an excellent remedy for a sprain, if applied at once.

Cuts and wounds need nice treatment at first, or they leave ugly marks when healed. It is not wise to stop the bleeding too quickly, unless it be very profuse. The part should be well washed with cold water, and, if the cut has been made with a *clean* knife, the edges may be then pressed together, and secured with sticking-plaster. Wounds that have been made with a rusty knife, nail, broken glass, or gun-shot, should not be closed at once, but kept open by poulticing, so that anything in the wound may be drawn out. When it is quite clean, it may be plastered.

When wounds are serious-looking, and bleed profusely, no time should be lost in sending for the doctor.

Burns and scalds are things of frequent occurrence, and often prove tedious if not promptly attended to. A simple dressing of the oil and lime-water should be quickly applied on a piece of linen covered over with flannel. For a very slight burn or scald, a little common whiting moistened and laid on is a very efficacious remedy. When a person is in flames, and too frightened to do anything but rush about, take the nearest hearthrug, carpet, blanket, or any other large woollen article, and wrap round her to extinguish the flames. *Cut* off the clothing, cover the burns over well with soft cotton-wool, and send for the doctor—the case is too serious for home treatment. The wool will keep the cold air from the burns, and help to promote perspiration, which “brings out the fire.”

It is highly important that children be taught not to run about if their clothes take fire, but to roll themselves on the floor if no one is near.

27.—A POULTICE AND A BASIN OF GRUEL.

These are two of the most useful and most frequently called-for of domestic remedies. And yet, how comparatively few people can make either to perfection!

The object of a poultice is, to give a continuous

moist warmth to any part affected with pain. *Some* of the poultices we have seen could not possibly do this; for they have been made in such strange fashion that, by the time they had been applied a few minutes, they were quite cold, and as hard and crisp as a Scotch oat-cake.

A good poultice is *thick*, so as to retain the heat; *moist* enough to be soft without being sloppy; perfectly *smooth*, and *free from lumps*, so as not to irritate the skin; *hot* enough and *large* enough to answer its purpose. The water with which it is mixed should be boiling; and it is better to carry the poultice to the patient's room in the basin in which it is mixed, covering it with a hot plate. It should then be spread thickly in the middle of a piece of old, soft muslin, turning the corners of the muslin over it, and, when applied, should be well covered with several folds of flannel to keep in the heat and moisture. The same rules apply to hot poultices of all kinds, whether bread, oatmeal, bran, or the most generally used one, linseed-meal. When mustard is mixed with the latter, only very little should be used.

When changing poultices, care must be taken not to expose the surface of the skin to the cold. A chill would probably undo all the good the poultice had done. It is necessary to be very careful, too, when the poulticing is discontinued. A covering of soft cotton-wool should be applied to the part, to prevent a too sudden change of temperature, and also to protect the tender skin from any friction.

A basin of gruel is such a well-known and thoroughly old-fashioned remedy for a cold, and for use in many other cases of sickness, that it seems a very bold assertion to say that comparatively few people can make it to perfection. But we have seen some very sorry specimens of gruel from time to time, and have not wondered that they remained almost untasted. A watery-looking fluid, with a thick sediment of oatmeal at the bottom of the basin, and almost void of taste, is a mixture which is sometimes called gruel. Or perhaps it consists of a pasty-looking mixture, well charged with *lumps* of oatmeal, and well calculated to make a patient worse instead of better. It would be as much as anyone *in health* could do, to take a basin of gruel of this description. How torturing it must be, then, to an *invalid*, to be offered such unappetising concoctions! No wonder children shrink from taking a cup of gruel when it has once been presented to them in such form!

We would have every girl over twelve years of age taught to make a poultice and a basin of gruel in a proper manner. Children may be of great use when no one else is near, if we are careful to instruct them what to do, and how to do it, when anyone is ill. As we previously remarked, a large majority of the children of the poor have no chance of learning these things at home. How much greater the need, then, that they be taught in our elementary schools. It is of little use to go through a round of "cooking lessons" in such schools, in a mere mechanical fashion.

The children should be at the same time taught to *reason*, and induced to *practise at home* what they have learned at school.

And what of the girls in our High Schools? and of the still older girls who pursue their education at school or college until twenty years of age or more? Sometimes a friend will tell us that "Miss So-and-so is remarkably clever—well up in Greek and Latin, and so proficient in mathematics that no problem puzzles her." And we feel almost withered up by the look of astonishment we receive, if we innocently ask, "Can Miss So-and-so also make a poultice or a basin of gruel?" as if the Higher Education of Women quite exempted them from the possibility of ever being called upon to do such things!

Now, whilst we become very enthusiastic over the scholastic successes of our highly-intellectual lady friends, do we not somehow think just a *little* less of them, *as women*, if we meet them in a sick-room, and find them "perfectly puzzled" to know what to do, or how to do it, when it is only a poultice or a basin of gruel that is required? It will be very sad for the homes of England if the higher education of women leads them to utterly disregard the more practical knowledge which women are called upon to exercise, in keeping home healthy, and in being prepared to meet sickness when it comes.

28.—EDUCATION AND HEALTH.

Great controversy arises in the present day as to whether the tendency there is to push education is compatible with health. We cannot argue that it is so in every instance; for minds and intellects are so diversely constituted, that all are not capable of the same cultivation. If all were *equally* great or small, where should we look for the great men who lead the world in thought—our statesmen and leading politicians, our poets and divines, or the leading literary and scientific men, who carry us captive with their theories?

Much discrimination is necessary with regard to the education of children; for, while being educated is a very easy matter to one child, it is a very serious one to another. Therefore we have no right to expect every child of the same age to be equally clever, though each may have the same educational advantages. A sound, healthy body is essential for a very active mind to dwell in—the latter soon makes sad havoc of a frail tenement. If, therefore, a child be physically weak, can it be deemed at all prudent to push its education—to make it compete with those of the same age who are physically strong?

But, given that a child has naturally a healthy mind and body, our great care must be to educate *both*—not to pursue mental education to the utter neglect of physical. The body needs training as well as the mind, and the two should be so trained

that they may help each other. If each receives its due amount of work and rest, a healthy child will not take much harm in being educated.

As a rule, there is less fear for boys than for girls under the present educational pressure which is brought to bear upon them. Schoolboys are allowed a due amount of physical training in most schools—perhaps a little more than is due, sometimes. But the girls have no cricket nor football, and their physical training is limited to a very demure walk once a-day, which is in some instances supplemented by an hour a-week in a gymnasium.

We often meet with schoolboys and girls who will readily give us good reasons why they pursue their mental education. They wish to be clever, accomplished, and, if necessary, fitted to earn their own living. But when we come to speak to them of their physical education, we find they regard it simply in the light of *play*, and seem very much amused that we should call it education. Now, if our boys and girls were taught elementary physiology, they would be able to give as good reasons for their play as for their study. It would give the boys higher aims than being “first in the race,” with a view to a silver cup or some other prize. It would teach them to play for health’s sake first, and for prizes afterwards, as far as health would allow. When we see a boy faint in the race, may we not conclude that his ambition has carried him beyond his physical strength, and that he has had the prize in view rather than health while undergoing his physical training ?

As a rule, girls have less inclination than boys for muscular exertion. But if they were taught physiology, would it not show them the actual necessity for a certain amount of exercise? And would it not also imbue them with sufficient common sense to prevent them trying to make their waists half the size which Nature intended them to be? It is painful to think that, in this wonderfully enlightened nineteenth century, the physical education of girls is so much neglected, that they grow up knowing no better than to commit a slow suicide, by pinching themselves up in stays, until heart, lungs, and all digestive organs are pushed out of place. How is it possible, under such circumstances, for girls to grow up into fine, healthy women? This question leads us to offer another homely hint to *mothers*. For are not mothers responsible for the physical education of their girls? Let the girls have plenty of play, and *no stays* until after they are thirteen or fourteen years of age. By that time a judicious mother will have taught her girls to dread tight-lacing, and their muscles will have become so accustomed to free play, that they will be unable to bear the discomfort of tight stays.

A sound physical education, based on the laws of health, and given in a logical, not unreasoning fashion, will do very much to give our youth the sound bodies in which sound minds should dwell—the two in perfect harmony and health.

But, whilst we speak so freely of the defective physical education which children receive, are there not also defects in the present system of mental

education, which should not be overlooked when health is in question? Cramming for examinations is the chief aim in many of our schools. This is not real education. For education *cultivates* the mind and intellect—stores them with matter which they will reproduce with pleasure and profit when school-days are long past. Cramming fills them with facts which are mechanically emptied out on examination papers, and then, in many instances, *forgotten*. And what of health while cramming is being substituted for educating? Very, very often it suffers, especially so where children are of a delicate, *nervous* temperament. Over-anxiety, sleepless nights, loss of appetite, and ultimate breaking down of health, are some of the attendants of the cramming system. Some few may escape these serious effects; but it behoves parents and teachers to see to it that children's health does not suffer from an undue amount of mental cramming.

Another thing which is highly detrimental to health is the sitting posture which is, in many schools, maintained throughout the day. *Can* it be healthy to sit so many hours with the body bent forward, the arms resting on a desk, and pushing the shoulders almost up to the ears? Perhaps there are no backs to the seats, and the children cannot change position, so as to rest the back for a few moments. Under such circumstances the body becomes over-fatigued, the mind grows listless, and thus mental and physical education are together impeded.

Cleanliness and fresh air must be as strictly

applied to schools as to homes if our children are to be healthy. Overcrowding and imperfect ventilation in sleeping apartments are still to be found in boarding schools, though somewhat rarely as compared with former times.

But it is *at home* that all education—mental, physical, and moral—must begin. Very much may be done towards the attainment of healthy minds and bodies by proper home training before children are of school age. Though their minds may not be filled with book-learning, they may be taught to observe, to think, to reason, and to judge between right and wrong. They may also be trained to know what is conducive to the health of the body, or what likely to injure it. Young children are very impressionable, and very much of their conduct in after-life depends upon their earliest mental, moral, and physical education.

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